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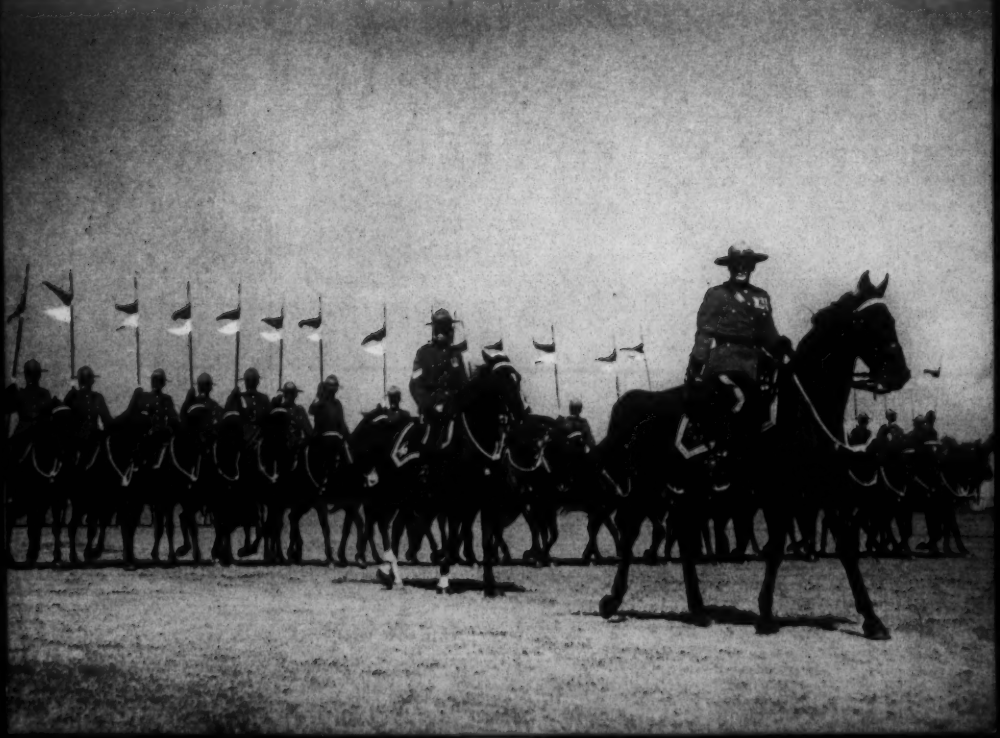
HERE COME THE MOUNTIES—Regina, Saskatchewan's Capital, Houses Western Division Headquarters of the Famed Scarlet-Jacketed Royal Canadian Mounted Police

61 NATIONAL GEOGRAPHIC PHOTOGRAPHER J. BAYLOR ROBERTS



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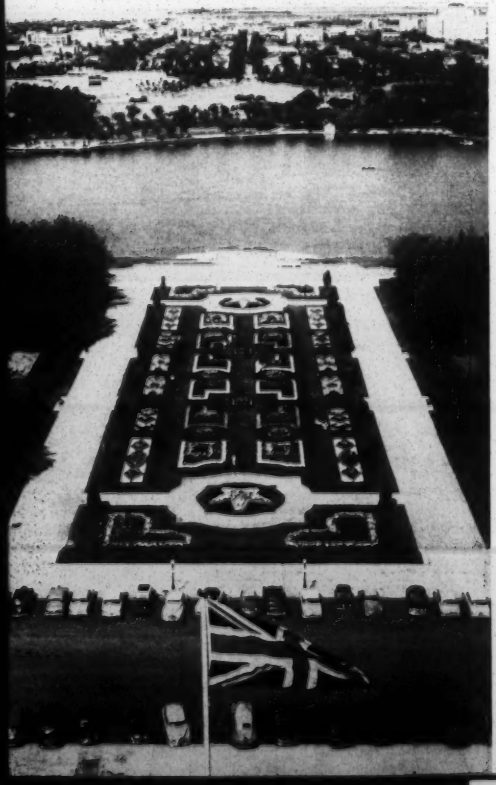
SASKATCHEWAN'S GEOGRAPHIC REGIONS—This National Geographic Map Shows Main Types of Land Use. In the Far Northwest Corner of the Ore-Rich Pre-Cambrian Area Lies Uranium City

by a window. Circling Regina, he looked down on neat, landscaped grounds around Saskatchewan's domed legislative building. He saw huge oil refineries on the city's rim, symbols of the province's soaring petroleum industy that produced some 5,000,000 barrels of oil last year, a figure experts say may double in 1955. He counted mills and plants that turn Saskatchewan's farm yields into flour, feed, cereal, and meat products.

"Indians once called Regina *Wascana*," his father told him, "which means 'pile of bones.' Braves let buffalo bones stack up in their campsites along the Wascana Creek after their hunting trips." But Tommy knew it as

NATIONAL GEOGRAPHIC PHOTOGRAPHER J. BAYLOR ROBERTS



the "Queen City of the Plains." Today it bustles with activity as Saskatchewan celebrates its golden jubilee.

Within minutes, the city had slipped behind and Tommy was watching the vast plains unroll beneath him. Huge squares of golden wheat explained how Saskatchewan, three times the size of Kansas, ranks as Canada's breadbasket. From the province's nitrogen-rich soil in the central belt (see map) comes three fifths of the country's wheat, much of its oats, barley, rye, flax, and alfalfa. Self-propelled machines allow a farmer and his son to work hundreds of acres.

Gradually Tommy saw dark-green woodlands staining the bright patchwork of fields and pas-

"QUEEN CITY OF THE PLAINS" Looking the Length of Their Colorful Formal Garden, Saskatchewan's Legislators Can See Regina's Distant Buildings

NATIONAL GEOGRAPHIC PHOTOGRAPHER VOLKMAR WENTZEL

HACKED FROM WILDERNESS, the Mining Town of Eldorado Lies on Beaverlodge Lake and Shares the Tiny Airstrip (upper left) with Uranium City, Three Miles Away

Saskatchewan, Uranium-Edged Breadbasket

That night, 12-year-old Tommy could hardly sit still. Tomorrow he would be on his way to fabulous Uranium City—center of one of the world's richest uranium areas. To Tommy, such a trip to the far northwest corner of his native Saskatchewan spelled adventure.

Eagerly, he helped his parents with last-minute packing. Before him flashed visions of a game-filled, lake-dotted forest region, of mines producing a mineral more precious than gold, of real Indians who work for a while near Uranium City, then return to forest homes in the fall.

"Maybe I can look at a uranium mine with you," he said eagerly to his father, a Canadian government geologist.

Tom's father could only say, "We'll see." He knew life would be far different from their comfortable routine in Regina, Saskatchewan's modern capital. There would be a raw, new school for his son to attend, muddy streets and high prices to make shopping hard for his wife.

Next morning, when the family boarded a plane, Tommy found a seat

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FRED A. WARDENBURG

The School Bell Rings for African Pygmies

The long arm of the schoolteacher is stretching even into the remotest jungles of Africa. As Americans mark their 35th annual Education Week, four-and-a-half-foot pygmies like those above are sending their children to school for the first time—often joining them in classes.

At pygmy schools widely spotted in French Equatorial Africa and the Belgian Congo, teachers first must master the complicated pygmy language, then hammer home the three R's. Some pygmies, avid traders, already can count well. They take quickly to numbers.

Instead of chalk and blackboard, instructors use stick marks on the soft ground in front of four-foot-high schoolroom huts built in an hour by pygmy women. Schools are frequently on the move, since pygmies abandon one village after another in quest of game animals.

The little nomads have long resisted formal instruction, preferring to hunt, make war, and practice primitive skills. Despite their size, they rate as formidable adversaries to man or beast. Fine marksmen with their short spears and poisoned arrows, they'll even take on wild elephants. A pygmy bowman can shoot three arrows so fast that the last one leaves the bow before the first hits its mark. If he misses, the sharpshooter is apt to fly into a tantrum and break his bow. But the schoolmarm, nowadays, will probably put a stop to *that* sort of behavior.

National Geographic References: ***Map***—Africa (paper 50¢)
Magazine—Dec., 1954, "Safari from Congo to Cairo" (school price 55¢)
March, 1952, "White Magic in the Belgian Congo" (75¢)
School Bulletins—Jan. 3, 1955, "The Door Is Open in the Belgian Congo" (10¢)

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NATIONAL GEOGRAPHIC PHOTOGRAPHER J. BAYLOR ROBERTS

RECIPE FOR A FULL BREADBASKET—University of Saskatchewan Researchers, on Experimental Acres at Saskatoon, Help Province Farmers Boost Wheat Yields

tures. Sparkling rivers, like narrow ribbons, looped through open prairie where antlike cattle, sheep, and horses grazed. Chains of lakes daubed blue spots on the widening green mat of forest which covers more than half the province, sheltering deer, moose, and caribou. Tommy's father explained how trappers still seek furs of bear, mink, otter, fox, and beaver in a forest area bigger than North Dakota. But it also yields minerals more important to the modern world.

As the plane's shadow skittered across the Churchill River, Tommy recalled history lessons. The river below was part of the waterway Alexander Mackenzie followed across Canada's "wide-spreading forest . . . lakes and rivers" in 1787. The Scottish adventurer, first man to cross the continent north of Mexico, added rich beaver-pelt provinces to Montreal's fur empire, paved the way for settlers from eastern Canada and, later, the United States. But not until 1905 did Saskatchewan become a province, when Canada carved it out of the vast Northwest Territories.

And then the plane is circling Uranium City's runway, near Athabasca Lake. This is Tommy's strange new home. He tugs at his father's sleeve, impatient to see the mushrooming town with street names like Nuclear Road and Fission Avenue. To Tommy, as to 50-years-young Saskatchewan itself, the future looks exciting.

National Geographic References: ***Map***—Canada, Alaska & Greenland (paper 50¢)
Magazine—Aug., 1955, "Across Canada by Mackenzie's Track" (school price 55¢)
Oct., 1954, "Hunting Uranium Around the World" (75¢)

Turkey is willing to have Britain continue in command, but if there should be any change, it would bitterly oppose Greece's taking over.

And Greece declares the Cypriotes have always been Greek and should unite with Greece.

As for the half million Cypriotes, their life is likely to go on with little change—as it has since the great days of the 300-year Lusignan dynasty when castles and cathedrals rose on hillside and harbor and scholars as well as soldiers flocked to the island.

Farmers till the upland plateau between the Kyrenia Mountains and the higher Olympus range whose peaks rise above 6,000 feet. Grainfields, citrus orchards, terraced vineyards checker plains and foothills in a climate like southern California's. Farm women still work beside their menfolk. Plodding oxen far outnumber tractors.

In hillside villages deft fingers of women and children weave bright fabrics on crude hand looms, skilled women potters make jars freehand—using no wheels. At Lefkara in the southern mountains, they still patiently fashion filmy webs like the lace altar cloth Leonardo da Vinci took back to Milan Cathedral from his visit to Cyprus in the 15th century. Craftsmen beat out pots, pans, and kettles of copper, which takes its name from the island. (The Romans gave the metal the name *Cyprium aes*—Cyprian brass—because they found it on the island. Shortened to *cuprum*, the Latin name became "copper" in English.)

Legends of Greek gods and goddesses and tales of Biblical characters are part of the Cyprus tradition. Aphrodite is said to have risen from

TRAFFIC OF THE AGES JAMS A PAVED ROAD—Besides Fat-Tailed Sheep Such as These, Cyprus Farmers Raise Citrus Fruits, Vegetables, Grains, and Make Wine

FRANC SHOR, NATIONAL GEOGRAPHIC STAFF

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SAME FORTRESS, DIFFERENT GARRISON—Knights in Armor Repulsed Turks at Crusaders' Kyrenia Castle. Here, British Paratroopers Hold the Medieval Strong Point

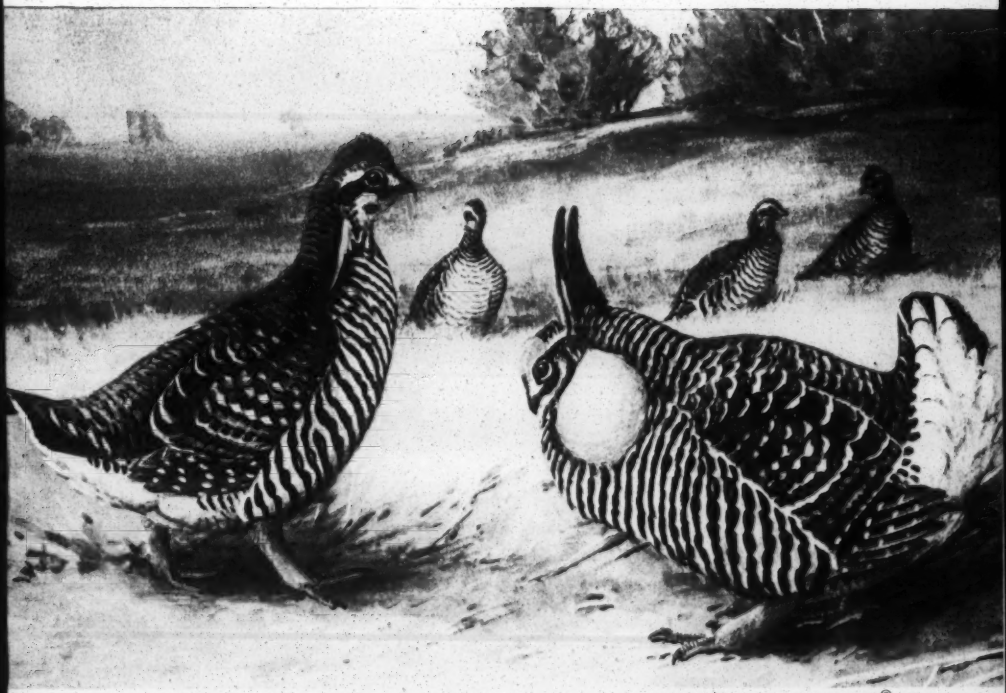
Cyprus: Historic Steppingstone of Nations

Little Cyprus, tucked away in the northeast corner of the Mediterranean, is hardly the right shape for a football. Yet three nations are scrambling for it as though it had been fumbled on the line of scrimmage. Britain, Greece, and Turkey are locked in a dispute over the island which threatens the stability of NATO, of which they are all members.

Perfectly situated as a steppingstone between three continents—Europe, Asia, and Africa—Cyprus has known a host of rulers in its nearly 5,000 years of history. Earliest settlers are believed to have been sea rovers from the Aegean islands. It bounced between Egyptians, Greeks, Assyrians, Persians, Macedonians, and Romans in ancient times.

Richard the Lionheart of England took it over on his way to the Crusades. The Knights Templar bought it, then sold it to Guy de Lusignan, titular king of Jerusalem. Venetians acquired it through marriage ties, but lost it to Turks. In 1878, Britain's Prime Minister Disraeli picked it up in a deal with Turkey and Britain made it a Crown Colony when Turkey joined Germany in World War I.

The British see Cyprus as their most important military base between Gibraltar and Ceylon. They have spent $210,000,000 on military installations, as well as large sums for education, reforestation of dwindling timberlands, irrigation of farms.



FROM A PAINTING BY ALLAN BROOKS. © NGS

Prairie Chicken's Call Grows Fainter

A century ago, pioneers camping beside covered wagons far out on the Great Plains welcomed the throbbing call of the prairie chicken. A deep, resonant booming, like the noise produced by blowing across the mouth of an empty bottle, it carried far in the silence of the frontier—a friendly sound in a lonely land.

Huge flocks of these husky, yellow-brown game birds nested in grasslands between the Appalachian Mountains and the Rockies and seemed to darken the sky as they congregated in winter. The travelers laughed at their courtship dance, when the male "honors his partner" with a courtly bow, then stamps, jumps, and whirls to the drumlike note that comes from his distended air sacs. It seemed like an Indian dance, carried on to the beat of tomtoms—and so it was, for Plains Indians aped the prairie chicken's shuffling, pivoting gyrations. Best of all, to hungry pioneers, was the fact that the two-pound wildfowl was a tasty dish. No one need starve as long as that booming call echoed over the prairie grass.

It echoes far less today. The National Wildlife Federation plans to set up a refuge for the estimated 350,000 prairie chickens that remain in the United States—a remnant of the vast numbers whose whirring wings once sounded like a fresh wind. The same pioneers that once admired these abundant birds began the trend that has threatened their existence. Plows have nibbled away the perennial grassland where the birds must nest and raise their young. Automobiles and hunters' guns have taken their toll. But in the cattle country of Kansas, Nebraska, the Dakotas, where grassland provides cover, that pulsing call still sounds as it did before the white man came.

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the waves off the southwest coast. A broken marble column stands near Paphos. The story goes that St. Paul was tied to it and lashed for preaching Christianity. The walled city of Famagusta is the scene of most of Shakespeare's "Othello."

Today British jet planes roar overhead as oxcarts, painted with blue spots to avert bad luck, creak along modern highways with harvest loads of wheat. Regular air service connects Cyprus with neighboring Beirut, Cairo, Damascus, Tel Aviv, and such faraway spots as Rangoon, London, and Tokyo.

The rugged green island is a vacationland for residents from all over the Middle East. In charming modern hotels or picturesque, antiquated inns on cool, wooded hillslopes, they take refuge from the sizzling summer heat of their mainland homes.

FRANC SHOR, NATIONAL GEOGRAPHIC STAFF

NEW GENERATIONS LEARN THE OLD WAYS

Grandmother's Sieve Has Been in the Family 200 Years, Sifting Grain from Cyprus Fields

Nicosia, capital of Cyprus, and Famagusta, second city, mix old and new. Modern structures of glass brick and concrete stand beside old Crusader ruins. Through narrow, cobbled streets modern automobiles honk past donkey carts and crowds of pedestrians. The street scene includes Turks in baggy trousers, Greek women in bright hand-woven robes, British Tommies, American fliers, and black-robed Greek Orthodox priests. Modern shops display Western goods—English woolens and cottons, tooth paste, and glassware (none manufactured on Cyprus). At copper-craft bazaars one can order anything from a muffin pan to a wash tub. Vendors sell *kebab*, lamb roasted on skewers—local equivalent of the American hot dog.

As Greeks and Turks riot over the future of Cyprus, Britain's answer to violence has been the appointment of Field Marshal Sir John Harding as governor of the island. Experienced in Kenya and Malaya, as well as World War II, Harding has just retired as Chief of the Imperial Staff, his country's top army position. He may solve the problem of how to maintain NATO's influence, and keep peace in the Mediterranean.

National Geographic References: ***Map***—Southwest Asia (paper 50¢, fabric $1)

Magazine—May, 1952, "Cyprus, Idyllic Island in a Troubled Sea" (75¢)
July, 1928, "Unspoiled Cyprus" ($2)

School Bulletins—Oct. 11, 1954, "Jets Add New Note to Ancient Cyprus" (10¢);
Jan. 26, 1953, "Air Age Mixes with Ancient Past on Cyprus" (out of print)

FROM A PAINTING BY H. M. HERGET, © NGS

INCAS GAVE THE WORLD POTATOES

With Crude Tools These Farmers Dig Tubers, Long a Food Staple in the Andes

persuaded their awed enemies that this was the "Son of the Sun" come to demand allegiance. Cusco's inhabitants were convinced. Their loyalty swung to Roca who became the first of the imperial Inca dynasty.

From 1100 to 1533 the empire grew. Isolated valley tribes, high in the Andes, were assimilated. Along the coast, town after town fell before those typical Inca weapons, diplomacy and tolerance (backed by well-handled battle-axes). Beaten chieftains got top-notch administrative jobs; their people were encouraged to live as before, but under the protection and guidance of the Inca. All that was asked was loyalty.

There were taxes, of course. Within the empire, householders paid them off in produce or public works, for there was no such thing as money in this gold-rich land. A man might work out his tribute on the stone terraces which rose like giant staircases to hold soil and make steep mountain slopes productive. Or he might labor on a section of the 10,000 miles of paved road that tied the empire together. These highways crossed mountain passes, perhaps 15,000 feet high, by turning into steps, for the Incas never used wheels. Travel was by foot. Burdens were lashed to disdainful llamas who spat in their drivers' faces if loads were too heavy.

Messages traveled by runners who raced from one stone post-house to the next, passing along the *quipu*, or knotted string record of statistics (Incas had no writing). Army detachments marched quickly to any outpost, crossing misty gorges on suspension bridges hung from thick cables of aloe. The

FROM A PAINTING BY H. M. HERGET, © NGS

"HOW MUCH FOR A LLAMA HAUNCH?"

Another Potato May Seal the Bargain in This Inca Market. Such Barter Trade Continues Today among Cusco Indians

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FROM A PAINTING BY H. M. HERGET, © NGS

Imperial Incas Lived a Golden Age

The city has fallen. Stern-faced alien priests and followers mount the temple steps. The leader, glittering in gold-flecked robes and adornments, carries a sacred disk of burnished gold representing the sun. Awed, the populace falls prostrate, expecting brutal treatment from their highland conquerors.

But inhabitants of the coastal city west of the Andes Mountains needn't worry. True, the military might of the Inca Empire has defeated them, but now they become subjects of a fatherly monarch who will inspire their loyalty by taking the best care of them that he can. The new sun symbol being carried into the temple will not displace their own deities. Instead, the Incas will combine the two religions.

This scene (above) harks back to the golden days of that fabulous Inca culture which welded Andes Indians into a mighty South American nation before Columbus's first voyage. The Incas themselves, haughty but benign ruling caste of this remarkable civilization, sprang from humble stock. Originally a small tribe of llama herders, wresting a sparse living from the thin soil of an Andean valley, they felt the call of "manifest destiny." At the end of the 11th century, when armored knights of the First Crusade were capturing Jerusalem, Inca tribesmen set out for the fertile, mountain-rimmed valley of Cusco to improve their lot.

Faced by angry Cusco natives who resented the intrusion, the Incas displayed some of the guile that later marked their steady expansion. They selected a handsome youth named Roca, dressed him in a gold-spangled garment and placed him at a cavern's mouth overlooking Cusco—where the sun's rays would strike him and etch his figure brilliantly against the cave's dark interior. Pointing toward this sparkling vision, the Incas

FROM A PAINTING BY H. M. HERGET, © NGS

COTTON-CLAD INCA GIRLS FETCH WATER—Clinging to a Canyon Wall, Their Home Boasts Verdant Terraces. Bridge Meets Paved Road Leading to Mountain Spring

Inca himself, riding in his canopied litter, visited all parts of his realm.

Dwellings, fortifications, temples reflected a massive architecture based on the perfect fit of stone faces. At the ruins of Machu Picchu, mountaintop fortress city uncovered by three National Geographic Society-Yale University expeditions, stones still fit together as snugly as the cork in a bottle. Inca builders moved huge granite blocks without rollers, carved and shaped them with nothing but bronze or stone tools.

The Inca Empire expanded to roughly the size of all the Atlantic States, but became too unwieldy to handle. Civil war split it, then Pizarro's band of Spanish conquistadors sealed its doom. Today only ruins remain to hint at days of past glory, deep in the Andes, when irrigation ditches dropped mountain water from terrace to terrace as farmers hoed potatoes; when noblemen in vicuña-wool tunics mounted a staircase highway to call at a thatch-roofed mansion. The National Geographic Society has captured the color and charm of Inca civilization in its monumental new book (see references) that records native cultures which flourished in the Americas.

Today's Peruvian Indians still speak Quechua, the language of those first Inca tribesmen who marched on Cusco. They still play haunting tunes on the kind of flutes their ancestors used to celebrate a sun-god festival. And on dinner tables around the world, potatoes and lima beans are a reminder of the Incas. Both vegetables originated in the Andes.

Next Week: *The Maya Culture of Yucatan*

National Geographic References: *Special new book*—"National Geographic on INDIANS OF THE AMERICAS, A Color-Illustrated Record," Twenty chapters present the whole sweep of aboriginal life gleaned from articles in *The National Geographic Magazine*. 262 full-color illustrations, including 149 paintings. 432 pages. $7.50 in U. S. and possessions; $7.75 elsewhere.

***Magazine*—**Feb., 1938, "In the Realm of the Sons of the Sun" ($1)